

Joint Surveillance Target Attack Radar System, Common Ground Station

Description

The Joint Surveillance Target Attack Radar System (JSTARS) is a long-range, air-to-ground surveillance system comprised of an airborne element and a ground element. JSTARS data will be sent across the Marine Air-Ground Task Force (MAGTF) Command, Control, Communications, Computers, and Intelligence (C4I) network through existing and evolving tactical data networks. The CGS is also capable of receiving and fusing imagery data from unmanned aerial vehicles (UAVs) directly onto JSTARS data, providing an enhanced collection-processing capability.

The CGS consists of high-end workstations, mission and support vehicle trailers, which are both M1097A2 Heavy-Variant High Mobility Multipurpose Wheeled Vehicles (H-HMMWVs), and two M-1116A3 variant utility trailers. The mission vehicle trailer will be mounted with a 10-kw Mobile Electric Power (MEP) 803A generator, a single switch box, and ancillary equipment. The support vehicle trailer will carry additional ancillary equipment. The mission vehicle H-HMMWV is mounted with a shelter of the same form, fit, and function as the Lightweight Multipurpose Shelter (LMS) that houses the mission-essential equipment. The CGS is self-contained and provides storage and transportability of all mission equipment, support equipment, and six crew members. The Joint Services Workstation (JSWS) is a transit case system, containing the same hardware and software as the CGS, except for the communication hardware (but does have an organic Joint Tactical Terminal (JTT)) and SCDL. When it has the associated communication

hardware and/or SCDL it performs in the same manner as the CGS.

Operational Impact

The JSTARS CGS provides the supported commander, afloat and ashore, with near-real-time (NRT) access to MTI, FTI, and SAR data from the JSTARS collection platform. MTI, FTI, and SAR data will be accessible at all echelons of command within the MAGTF. The JSTARS CGS is a MEF-level asset, which is deployed as part of the MAGTF G-2 and operated by Marines from the Intelligence Battalion, providing the MAGTF commander with a detailed image of the battlefield.

Program Status

The JSTARS is currently in a post-Milestone C. The Marine Corps currently possesses three JSTARS CGSs and five JSWSs.

The program is currently conducting two levels of efforts: the maintenance and upgrade of the current JSTARS CGSs and JSWSs, and the research and development of future MTI collection capabilities.

Procurement Profile:	FY 05	FY 06
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Quantity:	0	0
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Developer/Manufacturer:

Prime Hardware Integrator:

General Dynamics Command,
Control, Communications and Computers (C4)
Systems (GDC4S), Scottsdale, AZ

Software Integrators:

GDC4S, Scottsdale, AZ; Harris Systems,
Melbourne, FL

SCDL: Cubic Defense Systems, San Diego, CA